

Amendment to the Claims

A full listing of the claims is as follows:

1. (Currently amended) A method for producing a decellularized extracellular matrix material containing a growth factor, wherein the method comprises:

(a) conditioning a body tissue of a donor animal *in vivo* to produce the growth factor in an amount greater than the amount of the growth factor that the body tissue would produce absent the conditioning;

(b) allowing the conditioned body tissue to produce the growth factor *in vivo*;

(c) harvesting the conditioned body tissue from the donor animal; and

(d) decellularizing the conditioned body tissue to obtain the extracellular matrix material containing the growth factor, wherein the decellularizing involves the use of a protease inhibitor, wherein the decellularizing step is performed without substantially altering the histoarchitecture of the body tissue;

wherein the steps (a) and (b) are conducted before the harvesting in step (c), and wherein the donor animal is a primate or domesticated animal.

2 – 4. (Canceled)

5. (Previously presented) The method of claim 1 further comprising monitoring the amount of growth factor produced by the conditioned body tissue.

6. (Original) The method of claim 1 further comprising delivering a therapeutic agent to the body tissue before the conditioning in step (a).

7. (Original) The method of claim 1 further comprising delivering a therapeutic agent to the body tissue after the conditioning in step (a).

8. (Original) The method of claim 1 further comprising adding a therapeutic agent to the decellularized extracellular matrix material.

9. (Canceled)
10. (Previously presented) The method of claim 1, wherein the donor animal is a cow, pig, horse, chicken, cat, dog, monkey, or human.
11. (Previously Presented) The method of claim 1, wherein the body tissue is an epithelial tissue, connective tissue, muscle tissue, or nerve tissue.
12. (Previously Presented) The method of claim 1, wherein the body tissue is a lymph vessel, blood vessel, heart valve, myocardium, pericardium, pericardial sac, dura mater, meniscus, omentum, mesentery, conjunctiva, umbilical cord, bone marrow, bone piece, ligament, tendon, tooth implant, dermis, skin, muscle, nerve, spinal cord, pancreas, gut, intestine, peritoneum, submucosa, stomach, liver, or bladder.
13. (Previously presented) The method of claim 1, wherein the growth factor is vascular endothelial growth factor (VEGF), transforming growth factor (TGF), fibroblast growth factor (FGF), epidermal growth factor (EGF), cartilage growth factor (CGF), nerve growth factor (NGF), keratinocyte growth factor (KGF), skeletal growth factor (SGF), osteoblast-derived growth factor (BDGF), hepatocyte growth factor (HGF), insulin-like growth factor (IGF), cytokine growth factor (CGF), platelet-derived growth factor (PDGF), endothelial cell growth supplement (ECGS), granulocyte macrophage colony stimulating factor (GM-CSF), growth hormone (GH), or bone morphogenic protein (BMP).
14. (Previously Presented) The method of claim 1, wherein the body tissue is conditioned by biological conditioning, chemical conditioning, pharmaceutical conditioning, physiological conditioning, or mechanical conditioning.
15. (Previously presented) The method of claim 14, wherein the biological conditioning comprises transfecting the body tissue with a nucleic acid that encodes the growth factor.
16. (Withdrawn) The method of claim 14, wherein the chemical conditioning comprises

incubating the body tissue in a hypotonic or hypertonic solution.

17. (Withdrawn) The method of claim 14, wherein the pharmaceutical conditioning comprises delivering a therapeutic agent to the body tissue.

18. (Withdrawn) The method of claim 14, wherein the physiological conditioning comprises exposing the body tissue to heat shock or cryopreservation followed by thawing.

19. (Withdrawn) The method of claim 14, wherein the mechanical conditioning comprises applying a force to the body tissue.

20. (Withdrawn) The method of claim 19, wherein the force is a mechanical force, centrifugal force, electrical force, electromagnetic force, hydrostatic or hydrodynamic force, sound wave, or ultrasound wave.

21. (Withdrawn) A decellularized extracellular matrix material produced by the method of claim 1 for injection into a subject.

22. (Withdrawn) A decellularized extracellular matrix material produced by the method of claim 1 for implantation into a subject.

23. (Withdrawn) A tissue regeneration scaffold for implantation into a patient comprising the decellularized extracellular matrix material produced by the method of claim 1.

24. (Withdrawn) A method of using the decellularized extracellular matrix material produced by the method of claim 1 to repair injured body tissue of a patient.

25. (Withdrawn) A method of using the decellularized extracellular matrix material produced by the method of claim 1 to regenerate injured body tissue of a patient.

26. (Withdrawn) A method of using the decellularized extracellular matrix material produced by the method of claim 1 to strengthen injured body tissue of a patient.

27 – 29. (Canceled)

30. (Previously presented) The method of claim 1, wherein the growth factor is vascular endothelial growth factor (VEGF).

31 – 33. (Canceled)

34. (Withdrawn) The method of 14, wherein the body tissue is conditioned by mechanical conditioning, and wherein the body tissue is small intestine tissue and the mechanical force is produced by the expansion of a balloon against the small intestine tissue.

35. (Currently amended) A method for producing a tissue regeneration scaffold for implantation into a patient comprising:

(a) conditioning a body tissue of a donor animal *in vivo* to produce a growth factor in an amount greater than the amount of the growth factor that the body tissue would produce absent the conditioning;

(b) allowing the conditioned body tissue to produce the growth factor;

(c) harvesting the conditioned body tissue from the donor animal;

(d) decellularizing the conditioned body tissue to obtain the extracellular matrix material containing the growth factor, wherein the decellularizing involves the use of a protease inhibitor, wherein the decellularizing step is performed such that the extracellular matrix microstructure of the body tissue is substantially preserved; and

(e) forming the tissue regeneration scaffold from the decellularized extracellular matrix material containing the growth factor;

wherein steps (a) and (b) are conducted before the harvesting in step (c), and wherein the donor animal is a primate or domesticated animal.

36 – 42. (Canceled)

43. (Previously presented) The method of claim 1, wherein the donor animal is a cow, pig, horse, monkey, or human.
44. (Previously presented) The method of claim 1, wherein the conditioned body tissue is allowed to produce the growth factor *in vivo* for at least 2 days prior to harvesting the conditioned body tissue from the donor animal.
45. (Previously presented) The method of claim 1, wherein the decellularizing step is performed such that the extracellular matrix microstructure of the body tissue is substantially preserved.
46. (Canceled)